

We claim:

1. A guide wire comprising:

an elongate core composed of a nickel-titanium alloy; and

a coil composed of a second material and surrounding a substantial portion of the core.

2. The guide wire of claim 1 wherein the nickel-titanium alloy comprises a super-elastic metal.

3. The guide wire of claim 1 wherein the nickel-titanium alloy comprises a linear-elastic metal.

4. The guide wire of claim 1 wherein the second material comprises a nickel-titanium alloy.

5. The guide wire of claim 4 wherein the nickel-titanium alloy comprises a super-elastic metal.

6. The guide wire of claim 4 wherein the nickel-titanium alloy comprises a linear-elastic metal.

7. The guide wire of claim 1 wherein the second material comprises stainless steel.

8. The guide wire of claim 1 wherein the second material comprises a precipitation hardenable alloy.

9. The guide wire of claim 1 further comprising:

a polymer tip surrounding a distal portion of the core wire.

10. The guide wire of claim 9 wherein the polymer tip comprises a radio-opaque filler whereby a distal tip of the guide wire may be more readily visible under fluoroscopy.

11. The guide wire of claim 1 wherein the coil comprises a single strand of wire.
12. The guide wire of claim 1 wherein the coil comprises a multi-filar strand.
13. The guide wire of claim 11 wherein the wire further comprises a rectangular cross-section.
14. The guide wire of claim 11 wherein the wire further comprises a circular cross-section.
15. The guide wire of claim 1 wherein the coil further comprises a pitch which varies along the length of the coil.
16. The guide wire of claim 15 wherein the pitch of the coil varies such that a distal end of the coil is more flexible than a proximal end of the coil.
17. The guide wire of claim 1 further comprising:
 - a hypotube, joined to the core and bonded to the coil.
18. The guide wire of claim 1 wherein a bond is formed between the coil and the core.
19. The guide wire of claim 18 wherein the bond comprises a weld bond.
20. The guide wire of claim 18 wherein the bond comprises an adhesive bond.
21. A floppy-tipped guide wire comprising:
 - a core;
 - a coil surrounding at least a distal portion of the core, a distal end of the coil extending distal of the distal portion of the core,
 - a tip bonded to the distal end of the coil; and
 - a polymeric safety ribbon bonding the distal portion of the core to the tip.

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add
a3